LYNCHBURG CITY COUNCIL
Agenda Item Summary

MEETING DATE: **October 29, 2002** AGENDA ITEM NO.: **6**

CONSENT: **X** REGULAR: CLOSED SESSION: (Confidential)

ACTION: **X** INFORMATION:

ITEM TITLE: **Pedlar River Discharge Station**

RECOMMENDATION:

Approval of the attached resolution authorizing the City Manager to enter into an agreement with the Department of Interior, United States Geological Survey (USGS), to install and maintain a discharge (gauging) station on the Pedlar River upstream from the Pedlar Reservoir.

SUMMARY:

The Pedlar Reservoir is the primary drinking water source for the City of Lynchburg. The discharge station will provide real time flow information to the Utilities Division for making decisions on Pedlar water usage.

PRIOR ACTION(S):

June 25, 2002 Work Session- Pedlar Reservoir Water Supply Briefing
October 8, 2002 PDC – Presentation on the Pedlar Discharge Station

FISCAL IMPACT:

First year not to exceed $27,100, one-time installation charge of $15,000 and prorated annual operation and maintenance costs of $12,100. Recurring costs of $12,100 per year or as adjusted by USGS. The capital cost and first year operation and maintenance cost will be budgeted in the fiscal year 2003-2004 operations budget as will subsequent operation and maintenance costs. The capital cost and first year operations and maintenance cost will be billed by USGS in September 2003.

CONTACT(S): Stephen Bontrager, Director of Utilities, 847-1322
Bruce McNabb, Director of Public Works, 847-1360

ATTACHMENT(S): Resolution
Additional information on the proposed discharge station.

REVIEWED BY: lkp

Resolution:

BE IT RESOLVED That the City Manager is authorized to execute the contract and other documents for the Pedlar Discharge Station and future USGS agreements for operation and maintenance of the station.

Introduced: October 29, 2002 Adopted:

Certified: _____
Clerk of Council

208L

Daily Discharge Station on Pedlar River

Purpose

This discharge station would monitor the Pedlar River flow into the Pedlar Reservoir. Predictions of water quantities available from the reservoir for potable treatment are inadequate. Once the survey of the reservoir bottom is completed, the Utilities Division will be able to more accurately forecast available water supplies from the Pedlar Reservoir. With the addition of the discharge station, the division will have better data on influent flows from the Pedlar River.

Background

The Pedlar Reservoir is located in the George Washington National Forest in Amherst County. The Pedlar Reservoir is one of the primary drinking water sources for the City of Lynchburg. Accurate flow information is critical for making decisions on Pedlar water usage especially during times of drought or heavy rainfall.

Because of the reservoir's remote location there are limited resources for obtaining and transmitting accurate flow information. At present there is no method for recording flows into or out of the reservoir. In the past, water flows have been estimated by measuring the reservoir surface elevation below the spillway, and estimating the discharge to the gravity line from the gatehouse. This method does not provide accurate forecasts of the amount of water in the reservoir or water flows replenishing the reservoir.

The gauging station will provide influent flow information which will be an important tool for informed resource allocation. The information will be posted on the USGS web site.

Resource Requirements

The Hydrologic Network of the United States Department of the Interior, the USGS, will provide the service for a fee. The remoteness of this location will result in a higher installation cost because phone lines are not available for data transmission. The costs for this installation will cover construction, installation, equipment, material, and setting up a computer system to accept data. This system will utilize a satellite link to transmit data. There would also be an annual fee to cover normal stream gauge operation and maintenance.

The installation of this system will cost the City of Lynchburg $15,000. The annual maintenance charge will be $12,100. The first year maintenance costs will be prorated.